

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025738**Date Inspected:** 14-Jul-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG 13BE, CB18, CB19**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dennis Combs, was present during the times noted above for the observations relative to the work being performed.

This Quality Assurance (QA) Inspector has performed documentation review of the Green Tag system utilized by American Bridge/Flour (ABF) and Caltrans METS. This QA Inspector has Identified Complete Joint penetration (CJP), Partial Joint Penetration (PJP), and Fillet Welds in Lift 13BE. He has also verified the Non-Destructive Testing requirements for each weldment that includes the NDT process (UT, MT, and RT) and the percentage required by the contractor to perform. These items are within the Contract special provision, CCO 22 and within compliant of CCO 77. This information has been documented and compiled in a Green Tagging spread sheet that is located on the Caltrans Team China Z; drive.

**TRIAL ASSEMBLY YARD**

This QA inspector monitored testing of magnetic particle yokes used by ZPMC, and AB/F for testing of OBG welds with Interzink 22 primer located in contact area. Yokes were tested using a 10lb.+ steel plate with Interzink 22 primer with a DFT of 2 to 4 mils.

**ZHENHUA SHIP #19**

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Catwalk Supports located in Crossbeam numbers 18 and 19 throughout the length of the crossbeams. This QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed

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## WELDING INSPECTION REPORT

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against Notification No. 00689 dated July 13, 2011 and performed on July 14, 2011.

The following bolt sizes used in CB18 were:

M16 x 40 RC Lot # DHGM160045 and the final torque value established was 180 N-m.

M16 x 70 RC Lot # DHGM160054 and the final torque value established was 160 N-m.

M16 x 55 RC Lot # DHGM160012 and the final torque value established was 200 N-m.

M16 x 45 RC Lot # DHGM160021 and the final torque value established was 180 N-m.

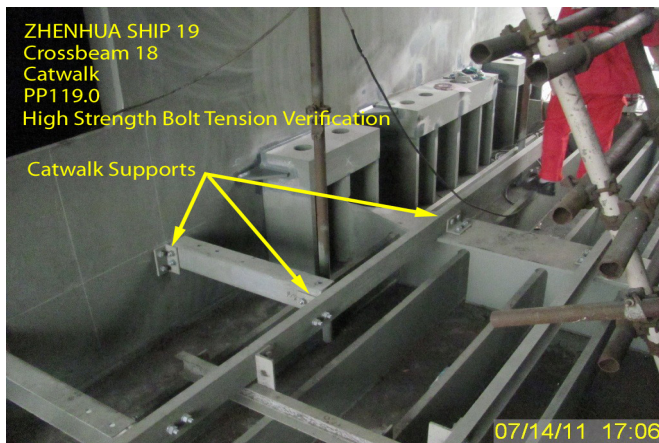
The following bolt sizes used in CB19 were:

M16 x 40 RC Lot # DHGM160045 and the final torque value established was 180 N-m.

M16 x 50 RC Lot # DHGM160011 and the final torque value established was 200 N-m.

The Manual Torque wrench used was Serial No. XO2-114.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Combs,Dennis	Quality Assurance Inspector
<b>Reviewed By:</b>	Riley,Ken	QA Reviewer

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